CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR SELF-FUNDED HEALTHCARE

September 11, 2006

This Policy is effective immediately upon adoption and supersedes all previous selffunded healthcare policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Self-Funded Healthcare Fund ("the Fund"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Fund. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with this segment of investments.

II. STRATEGIC OBJECTIVE

- A. Achieving the highest total rate of return, consistent with the liquidity and capital preservation requirements is the strategic objective of the Fund. Currently, the System funds four health plans from Self-Funded Health Care:
 - 1. CalPERS Care (Basic);
 - 2. CalPERS Care (Supplemental);
 - CalPERS Choice (Basic); and
 - 4. CalPERS Choice (Supplemental).
- **B.** The Fund shall be managed to accomplish the following:
 - 1. Provide sufficient liquidity to meet all cash needs; and
 - Enhance the Fund's total return.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment

Committee delegates the responsibility for administering the Self-funded Health Care Fund to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).

- B. The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the CalPERS Investment Committee.
 - 2. Developing and updating a procedures manual outlining the Staff operational procedures used in implementing this Policy.
 - 3. Implementing and adhering to the Policy.
 - 4. Auditing the securities trading activities of Fixed Income portfolio managers and traders by the Senior Investment Officer, Fixed Income;
 - 5. Reporting all violations in accordance with the violation reporting Policy.
 - 6. Hiring external money managers upon approval or direction of the Investment Committee;
 - 7. Purchasing only securities outlined in the Policy.
 - 8. Reporting to the Investment Committee at least quarterly on the portfolio characteristics on the following issues:
 - a. Relative duration;
 - b. Sector weights; and
 - c. An exceptions report that covers Policy violations.
 - 9. Reporting internally to senior management concerning the implementation of this Policy. This report shall be prepared monthly to include, but is not limited to, the following areas:
 - a. Current market value and allocations by sector compared to the Index:
 - b. Aggregate and individual portfolio characteristics (including duration) compared to guidelines;
 - c. An exceptions report that covers Policy violations.

- 10. Recommending action with respect to the <u>external manager(s)</u> retained to implement the Program, in accordance with the Policy or with respect to changes in the manager's contractual guidelines, or regarding any other aspect the Staff considers pertinent; and
- 11. Reporting to the Investment Committee on the performance of the Program as needed and monitoring implementation of, and compliance with, the Policy.
- C. The **External Manager(s)** ("manager(s)") are responsible for all aspects of portfolio management as set forth in their respective contracts with the System and shall fulfill the following duties:
 - Communicate with the Staff as needed regarding investment strategy and investment results. The manager(s) are expected to monitor, analyze, and evaluate performance relative to the agreed upon benchmark; and
 - 2. Cooperate fully with the Staff, the System's <u>custodian</u> and the <u>General Pension Consultant</u> concerning requests for information.
- D. The **Consultant** is responsible for monitoring, evaluating, and reporting to the Investment Committee, at least quarterly, about the internally and externally managed fixed income performance relative to the benchmark and Policy guidelines.

IV. PERFORMANCE OBJECTIVE

Exceed the return of the Lehman Brothers Aggregate Index (LAI)

V. INVESTMENT APPROACHES AND PARAMETERS

A. Philosophy and Approach

The investment approach is to identify opportunities across bond market sectors and invest where risks are both understood and manageable while complying with specifications in this Policy. Corporate, sovereign, and mortgage-backed securities may receive a greater allocation than the Lehman Aggregate Index (LAI) giver the higher return expectations. Studies indicate that optimal sector allocations in fixed income favor corporate and mortgage-backed securities over U.S. Treasury and Agencies. These studies, along with the Self Funded Health Care low liquidity requirements serve as the foundation for a strategy that sacrifices the quality and liquidity of U.S. Treasuries for higher returning corporate, mortgage, and sovereign securities. Low liquidity requirements are derived from a study by the self-funded health care staff which looked at historical core fund size and determined a core level which requires low amounts of liquidity.

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B. **Specific Parameters**

The System shall manage the following major categories of fixed income risk:

- Interest rate risk is the price volatility produced by changes in the overall level of interest rates as measured by an option-adjusted duration. The duration shall be maintained at +- 20% of the LAI on an option adjusted basis. Decisions shall be managed in a controlled manner using real returns, economic analysis, and Federal Reserve analysis.
- 2. **Yield curve risk** refers to price changes induced by the changing slope of the yield curve. Yield curve risk shall be managed in a controlled, disciplined fashion by monitoring and adjusting key rate and principal component durations.
- Convexity risk is the downside risk of an equal move up or down in interest rates causing a greater price loss than price gain. Convexity shall be managed by monitoring option adjusted convexity and using scenario analyses.
- 4. **Sector risk** is the risk of holding sectors that are in different proportions than the LAI. Based on the economic outlook, <u>historical factors</u>, and break-even analysis, Staff shall estimate the impact on various sector spreads and returns and make allocations accordingly.

a. **Permissible Ranges of Sectors**

Each sector has a range by which actual allocations can fluctuate.

TOTAL FIXED INCOME PORTFOLIO WEIGHTINGS

Sector	LAI as of 7/06	Sector Ranges
U.S. Treasury & Government Sponsored	40%	0-80%
Corporates	19	10-50
Securitized	41	0-70
Opportunistic	0	0-20

5. Credit risk is the uncertainty surrounding the borrower's ability to repay its obligations. Credit risk shall be actively managed through rigorous credit analysis. A downgrade of a security which creates a violation in the guidelines shall require an immediate sale unless the Senior Principal Investment Officer of Fixed Income determines that the sale potentially reduces the total return to the System. The following is the minimum credit quality for each of the sectors.

a. Treasury & Government Sponsored

The weighted-average credit quality shall be AAA rated.

b. **Corporates**

The minimum credit quality of corporate issuer is investment grade (at least Baa3 or P2 by Moody's or BBB- or A2 by Standard and Poor's). This sector includes domestic and U.S. dollar denominated and hedged into U.S. dollar non-dollar fixed income public utilities, transportation, industrials, and bank and finance companies. The review of all corporate issues shall occur at least annually by the internal research staff. Where the investment in corporate bonds is driven by a favorable macro-view of the corporate sector versus another sector like U.S. Treasuries and the implementation is done through a portfolio primarily managed through extensive issue diversification and industry constraints to minimize event and idiosyncratic risk, the annual review of issuers shall not apply. Non-rated bonds shall receive an investment grade rating (BBB- or better) from the internal research staff. The internal research staff shall review all securities at least annually.

c. **Securitized**

The minimum average-weighed credit quality of the portfolio will be AA rated.

- 6. **Structure risk** arises from the options implicit in bonds (like callable and optional sinking fund bonds) or cash flows that differ from expectations. Managing structure risk shall take place using option adjusted and scenario analyses as well as using <u>prepayment variability</u> stress testing.
- 7. **Reinvestment risk** is the uncertain future yield opportunities to invest funds that become available due to call, maturity, or coupon payments. Reinvestment risk shall be managed through <u>call risk</u> and cash flow analysis.

- 8. **Liquidity risk** is the ease with which an issue or specified amount can be sold at or near prevailing market prices. Based on the analysis conducted by the Self Funded Health Care Staff, few liquidity constraints exist.
- 9. **Currency Risk** is the price volatility emanating from the value of the U.S. dollar relative to other currencies of the world. To eliminate this risk, all securities shall be denominated or hedged in U.S. dollars.

C. Restrictions and Prohibitions

- Investments in a single corporate issuer shall not exceed 2% of the total portfolio. For AAA rated asset-backed and mortgage-backed securities, each separate trust (pool of assets) is defined as a separate issuer and shall not exceed 10% of the total fixed income portfolio. For High Quality LIBOR, Short Duration, and State Street STIF, no single issuer limit exists;
- 2. Non-investment grade securities shall not exceed a maximum of 10% of the total fixed income portfolio;
- 3. Option adjusted durations of the total fixed income portfolio must be within +- 20% of the option adjusted LAI duration;
- 4. All sectors must be within the permissible ranges specified in Part IV. B. 4. a. of this Policy;
- 5. CBO/CLO equity shall not exceed a maximum of 5% of the total fixed income portfolio; and
- 6. Tobacco company investments are prohibited.

D. Permissible Securities

- 1. Treasury and Government Sponsored Securities (including derivative securities whose deliverable instrument is a U.S. Treasury or government obligation);
- 2. Publicly Traded Investment Grade Corporate Bonds;
- Privately Placed Investment Grade Corporate Bonds;
- 4. Publicly Traded Mortgage-Backed Securities, including CMOs/ REMICs whose deliverable instrument or underlying collateral is a U.S. mortgage-backed security;

- 5. U.S. Privately Placed Investment Grade Mortgage-Backed Securities including single-family residences, commercial loans, and other privately placed mortgage-backed securities;
- 6. Investment Grade Asset Backed Securities;
- 7. Investment Grade Eurobonds;
- 8. Investment Grade <u>Yankee bonds</u>;
- 9. Investment Grade Municipal Bonds;
- 10. Investment Grade Non-Dollar Fixed Income hedged into U.S. dollars that are consistent with the Foreign Debt Policy (Attachment A); and:
- 11. Opportunistic Securities (see Section X).

VI. BENCHMARK

The benchmark shall be the Lehman Brother's Aggregate Index.

VII. GENERAL

Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations shall be on a market value basis.

VIII. DERIVATIVES AND LEVERAGE POLICY

A. <u>Financial Futures, Swaps, and Options</u>

All transactions involving derivatives and <u>leverage</u> are governed by the California Public Employees' Retirement System Statement of Investment Policy for Derivatives – Investment Office. In addition to the restrictions defined in the Derivatives Policy, the following conditions apply:

- Short selling of securities is prohibited, except in financial futures (as outlined in Part IX. A. 4. of this Policy);
- 2. Leverage is prohibited except futures position where there is an associated cash position (which together creates a synthetic bond);
- 3. The Staff may buy or sell the following fixed income related derivatives: swaps, financial futures, options on financial futures, options on volatility, options on underlying securities, and options on securities indexes, which includes over-the-counter options (as specified in Part VI. D. 1. of this Policy); and

4. Acceptable strategies include bona fide hedges (to help achieve the target durations) and strategies that exploit the market's erroneous estimation of the volatility of interest rates. Other acceptable strategies include taking advantage of inaccurately priced instruments or using a more efficient method of implementing the investment objectives of the Portfolio.

B. <u>Collateralized Mortgage Obligations</u> (CMO)

1. **Philosophy**

CMOs are considered an important strategic tool for fixed income management. They segregate mortgage cash flows into instruments with different risk/return characteristics than the underlying mortgage pools. These instruments shall be purchased when valuations indicate a superior return versus other securities in the fixed income universe. Selected instruments shall generally exhibit positive convexity and superior call protection versus conventional mortgages. They shall only be purchased after performing the appropriate scenario, break-even, option adjusted, and cash flow analyses.

2. Purpose

Use of CMOs shall enhance return opportunities and manage risk at appropriate valuation levels while exercising prudence.

C. Restrictions and Prohibitions

- 1. Uncovered call writing is prohibited.
- 2. <u>Premiums</u> on purchased options on <u>futures</u> may not exceed 1% of the beginning market value of the total fixed income portfolio in any calendar year.
- 3. <u>Speculation</u> or <u>arbitrage</u> between two derivatives is prohibited. If a derivative is more attractively priced than the underlying security, the transaction is considered a substitution.
- 4. A maximum of 3% of the total fixed income portfolio may be invested in mortgage securities that are leveraged (e.g., inverse floaters).

D. Counterparty Exposure for Options, Swaps and Futures

1. The greater of \$500 million or 25 percent of the total notional derivative exposure can be maintained with any one counterparty for non-exchanged-traded derivatives (e.g., swaps, <u>caps</u>, <u>floors</u>, and options).

2. Transactions shall be executed with only domestic or non-U.S. brokers registered in the U.S. or the U.K. who have a short-term debt rating by at least two of the following three rating agencies:

A1 (Standard & Poor's) and P1 (Moody's), or F1 (Fitch Ratings), or rated on a long-term basis A3 (Moody's) A- (Standard & Poor's), or A- (Fitch Ratings Services). The Internal Research Staff shall actively review these brokers.

IX. OPPORTUNISTIC INVESTMENTS

- A. Securities or sub-asset classes, which are candidates for inclusion, shall have risk, return, and correlation profile sufficiently different from other sectors such that its inclusion or exclusion can affect the risk and return expectations of the Portfolio. The criteria for inclusion into this classification shall include, but are not limited to:
 - 1. Sufficient size, liquidity, and cost efficiency to allow a meaningful amount to be invested and have an impact on the total return.
 - 2. Availability of sufficient internal or external investment and technical expertise to insure prudent implementation of an investment in that sub-asset class.
 - 3. Presence of diversification, return enhancement, or some other readily identifiable attribute which is sufficiently different from other asset classes and which enhances the Fund's ability to achieve the strategic objectives outlined in this Policy.
 - 4. Acceptance by other large money managers or financial institutions as a viable and meaningful sub-asset class or in the absence of such acceptance, academic basis or foundation for its inclusion.
 - Availability of sufficient data and/or history or expertise to assess the viability or benefit of the asset class to the Fund and to have an investment outcome that is measurable from such an asset class. Further, the asset class must have a basis for developing expected investment return, risk, and correlations for purposes of the financial study.
- B. A sub-asset class may be approved for investment provided that it meets the criteria above and that the Senior Investment Officer, Fixed Income has reviewed educational literature and/or other sources to fulfill fiduciary responsibility and has received approval by the Chief Investment Officer.

C. Permitted Opportunistic Investments

- 1. Domestic and Hedged Non-Dollar <u>High Yield</u>, including corporate zero and <u>PIK</u> securities;
- 2. Leveraged and Un-leveraged Bank Loans;
- Asset Based Loans;
- 4. Non-investment grade CBO/CLO securities;
- 5. Convertible Bonds;
- 6. CMO residuals;
- 7. Dollar Denominated and Hedged Non-Dollar Sovereign Debt of countries that meet the requirements of Foreign Debt Policy (Attachment A); and
- 8. Other sub-asset classes may be added if they fit Part X, A and B.

X. GLOSSARY OF TERMS

Definitions of key words used in this policy are located in the Miscellaneous Investment Policies Glossary of Terms which is included in the System's Master Glossary of Terms.

Approved by the Policy Subcommittee:

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